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Our ref: TMA/1622

3rd March 2015

PRESS RELEASE

CLIMATE OUTLOOK FOR TANZANIA MARCH – MAY, 2015 RAINFALL SEASON

A: Introduction

This statement gives a review of rainfall performance for October to December, 2014 and an outlook for March to May, 2015 long rain season (*Masika*) in the country.

Highlights for March –May, 2015

1. Outlook for March to May, 2015 *Masika* rainfall season indicates that:

For the period of Mach to May, 2015, suppressed rains is expected over most areas of the country, while sufficient rainfall is expected over the lake Victoria basin and the Southern parts of the country.

Early onset of rains is expected over the Lake Victoria basin and few areas of northern coast.

2. Expected Impacts
Soil moisture levels are likely to be suppressed due to frequent dry spells and likely to affect normal cropping season over much of the country.

River flow discharges and water levels in rivers and dams are expected to be reduced from their current levels during the *Masika*, 2015 Season because of shortage of rains in most river catchment areas.

Short periods of heavy rains may cause excessive surface runoff and elevate flood risks during the season.

Outbreak of water borne diseases due to water shortage and poor sewage management are likely to occur.

B: REVIEW OF RAINFALL PERFORMANCE

During the short rain season of October to December (OND) 2014, most parts of Bimodal Areas experienced Normal rains with pockets of above normal rains over north-eastern highlands, while few parts especially along the northern coast experienced below normal rains.

Lake Victoria Basin: Bukoba, Musoma, Shinyanga, Ukiriguru and Mwanza stations received normal rainfall.

North-Eastern Highland: Arusha Station received above normal rainfall. Lyamungo, Babati and Kilimanjaro Station recorded normal rainfall while Same and Moshi Stations recorded below normal rainfall.

Northern Coast including Unguja and Pemba Islands: Morogoro and Ilonga stations reported above normal rainfall. Zanzibar, Pemba, Handeni and Amani stations received normal rain fall. However Dar es Salaam (JNIA and Port Stations), Tanga, Kizimbani, Kibaha, Matangatuani and Mlingano stations received below normal rainfall.

South-Western Highland: Iringa station received above normal rainfall, while Mbeya, Mahenge, Uyole and Tukuyu stations recorded normal rainfall. Sumbawanga and Igeri stations received below normal rainfall.

Western: Kigoma, Tumbi agromet, Tabora and Kibondo stations received normal rainfall.

Southern Coast: Mtwara and Naliendele stations received normal rainfall. However, Kilwa station received below normal rainfall.

Central: Singida station received above normal rainfall, while Hombolo and Dodoma Stations recorded normal rainfall.
Southern region: Songea station measured normal rainfall.

C: CLIMATE SYSTEMS OUTLOOK There is slight warming over Central Equatorial Pacific Ocean which is likely to persist throughout the season of March to May 2015. Warm sea surface temperature is expected over Western Indian Ocean (East African coast) and Eastern Indian Ocean (Indonesia). The warming implies weak easterly wind flow with likelihood of suppressed moisture towards East African coast hence periods of suppressed rains over the Northern coast and North-eastern highlands areas of the country.

Expected cooling over Angola coast and warming over the South-east Atlantic Ocean particularly during the months of March and April 2015, is likely to suppress westerly wind flow from Congo Basin towards the western, South-western and central areas resulting into less rains in the aforementioned regions. Warming across the South-western Indian Ocean basin during the months of March and April, 2015 is likely to trigger occurrence of tropical cyclones, thus contributing to drive climate systems during the masika rain season.

D: SEASONAL RAINFALL OUTLOOK:

Based on current and expected climate systems described above the March to May, 2015 rainfall season is likely to feature as follows:

(i) ***Long Rainfall Season (Masika) over Bimodal areas***

The March to May, 2015 long rainfall season (Masika) is more significant for the Northeastern highlands, Northern coast areas, Lake Victoria Basin and Northern Kigoma. The rains are expected to be normal to below normal over the northern coast and Northeastern Highlands, and normal to above normal over much of the Lake Victoria Basin. However, pockets of normal to below normal rainfall are likely to occur over Mara, Simiyu, and Shinyanga Regions

The onset of the long rainfall season (Masika) is expected to commence earlier over most areas in the March to May season. However dry spells are likely to occur in most areas particularly during the months of March and April 2015

Lake Victoria Basin: (Kagera, Mara, Mwanza, Geita, Simiyu and Shinyanga regions):
Rains in these regions have started during the fourth week of February, 2015 over Kagera region. The rains are expected to be normal to above normal over Kagera, Geita, Mara and Mwanza regions , while below normal to normal rainfall is likely to occur over Simiyu, and Shinyanga Regions.

Northern coast areas and hinterlands: (Dar es Salaam, Tanga, and Coast regions, Isles of Unguja and Pemba and northern Morogoro areas): Rains are expected to commence in the first and second week of March 2015. The rains are expected to be normal to below normal over Tanga, Dar es salaam and Coast regions together with Unguja and Pemba isles and below normal to normal over northern Morogoro.

North-eastern highlands: (Kilimanjaro, Arusha and Manyara regions): Rains are expected to start in the third week of March, 2015 and are likely to be normal to below normal over much of Kilimanjaro, Arusha and northern part of Manyara regions while mainly below normal rains are expected over areas of western and Southern Manyara.

(ii) **Seasonal Rainfall (November to April) over Unimodal areas**:

Seasonal rains are more significant for unimodal areas (Western, Central, Southwestern highlands, southern region and southern coast). Rainfall Over these areas began in November 2014. During March to May, the seasonal rains over most of these areas are expected to be suppressed. However pockets of normal to above normal rains are likely to occur over some areas as described here below.

Western areas: (Tabora, Rukwa, Katavi and Kigoma regions):
The ongoing rains are expected to be normal to below normal over Tabora, Kigoma, Rukwa and Katavi regions while extreme northern part of Kigoma region rains are expected to be normal to above normal. Rains are expected to end during the second and third week of April 2015.

Central (Singida and Dodoma regions):
The ongoing rains are expected to be normal to below normal over much of Singida and Dodoma regions. Rains are expected to end during the fourth week of March to first week of April 2015.

Southwestern highlands: (Mbeya, Iringa, and Njombe regions and southern Morogoro areas):
The ongoing rains are expected to be normal to below normal over much of the region. However Njombe region, parts of southern Morogoro (Mahenge) and Mbeya region regions are expected to experience normal to above normal rains. Rains are expected to end during the fourth week of April, 2015.

Southern region and Southern Coast: (Ruvuma, Mtwara and Lindi regions):
The ongoing rains are expected to be normal to above normal over much of the region. However, pockets of below normal rains are expected over Lindi region. Rains are expected to end during the fourth week of April to first week of May, 2015.

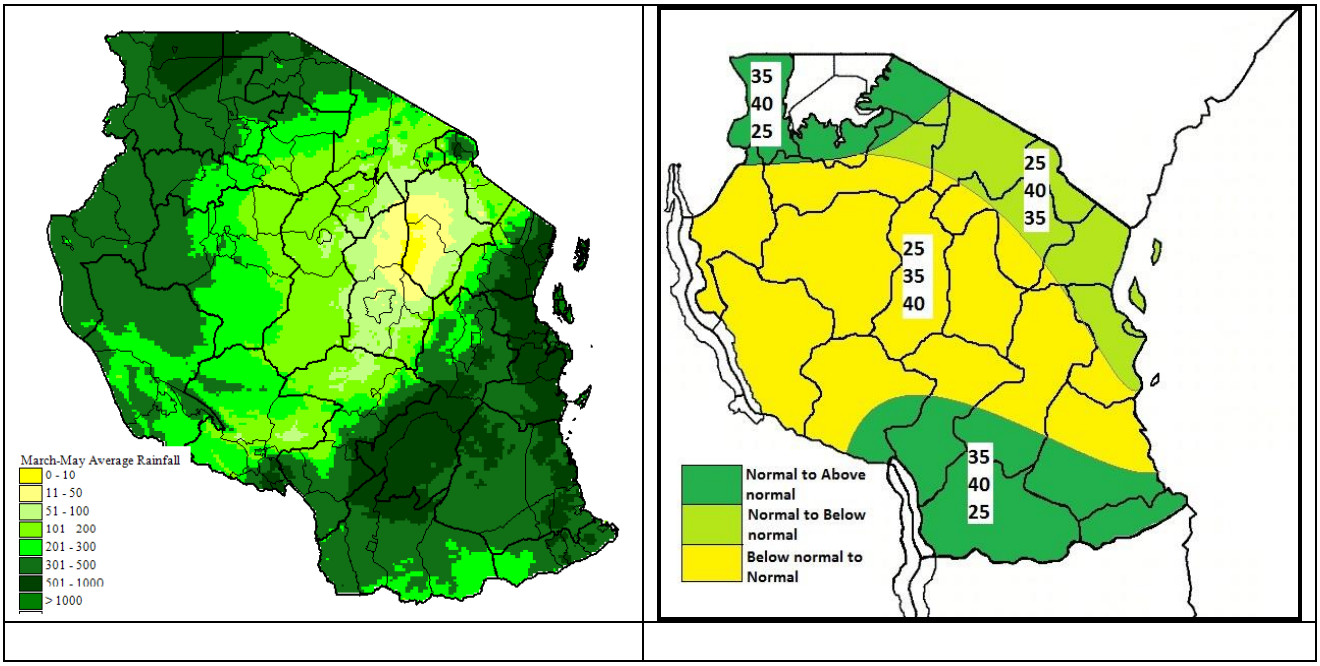

Figure 1 – Rainfall Normal Maps – left: Climatological long term average rainfall for March to May; right: Outlook for the coming rainfall season March to May 2015

It should be noted that although events of heavy and short duration of rainfall are likely to be more frequent in areas with above normal rains they are also common even in area of normal and below normal rainfall conditions. Development of tropical cyclones over the southwest Indian Ocean is likely to influence rainfall patterns in the country.

E: LIKELY IMPACTS AND ADVISORY

Below normal to normal rainfalls are expected over much of the country with exception of Lake Victoria basin, South-Western Highlands and Southern areas where normal to above normal rains are expected. The associated impacts on social-economic sectors and their respective advisories are highlighted as follows:

Agriculture and food Security Sufficient soil moisture levels are likely to favor normal cropping season over the Lake Victoria region, South-western highlands and some parts of the southern coast especially over Mtwara. Excessive soil moisture levels associated with above normal rainfall are likely to favor weeds and impede crop development, thus high use of agricultural inputs is likely to raise production costs. Farmers in the Lake Victoria basin areas are advised to prepare their farms and acquire agricultural inputs early enough while making appropriate land use management and right choice of crop varieties to plant. In these areas also yields are expected to be high so the community is advised to store the yields for use in future. For other areas where the below normal rains are expected farmers are advised to store sufficient amount of crops to sustain their household needs.

Pasture and Water for Livestock and wildlife

Pasture and water availability for livestock and wildlife over most of the areas where below normal rainfalls are anticipated is likely to be poor. Famers in those areas are advised to store animal feeds for the rest of the period. Also they are advised to reduce the number of animals they keep earlier when the prices are still good than later when the price become poor. In the areas where normal and above normal rains are anticipated farmers are advised to produce and store as much as possible animal feeds for use during the dry season. Due to high likelihood of disease outbreak, regular dipping and vaccination against pests and diseases are highly recommended. Wildlife-human conflicts due to wildlife migration and agricultural activities are likely to be higher during the season especially over the areas where below normal rains are expected. Wildlife management authorities and communities living closer to wildlife areas are advised to take necessary precautions.

Natural Resources and Tourism

Natural resources management and Tourism Authorities are encouraged to protect infrastacture such as roads and bridges against damage from the expected torrential and above normal rains in the National Parks and Game Reserve areas located along the Lake Victoria basin and Southern areas where normal to above normal rains are expected. For large part of the country where below normal rains are expected, shortage of pastures for wild animals is likely to occur so alternative measures have to be taken so as to reduce the impacts.

Energy and water

As of most of the dams are located over the areas where below normal rains are expected, shortage of water in the dams are expected so current available water in the dams have to be used sparingly. Deficit of hydroelectric power is expected due to shortage of water in the dams so alternative measures have to be taken so as to produce enough electricity for socio economic activities in the country. The areas where normal and above normal rainfall is expected water harvesting and storage

practices are highly recommended for the future use.

Local Authorities

Due to the fact that even in below normal rainfall areas, short periods of heavy rains are also expected, water drainage systems should be opened and cleaned so as to avoid water accumulation due to surface runoff and floods that may cause destruction of infrastructures, loss of lives and property.

Health sector

Due to the anticipated shortage of water in most parts of the country, the community may be forced to utilize unsafe water so there is a likelihood of outbreak of water borne diseases outbreaks. Relevant Authorities concerned with public health and individuals are advised to take appropriate health measures needed to minimize the expected negative impacts on health.

Disaster Management

Disaster management authorities and other stakeholders are advised to take necessary measures such as good practice of environmental conservations and ensure preparedness, response, and mitigation plan to reduce any negative impacts that may result from the expected below normal rainfall.

Media

The media is advised to obtain, make regular follow-ups and disseminate weather and climate information and warning including the updates as provided by appropriate Warning Authority the Tanzania Meteorological Agency - TMA. Moreover, Media is encouraged to seek and obtain inputs from relevant sectors when preparing and relaying cross cutting issues on Weather and Climate to the Public.

Tanzania Meteorological Agency advises all users of weather information including farmers, livestock keepers, wildlife conservation authorities, hydrological and health sectors to continue finding, getting and following expert adviser on their relevant sectors.

NB: The current status of seasonal forecasting allows for prediction of spatial and temporal averages and may not fully account for all physical and dynamical factors that influence short term climate variability. Users of this outlook are, therefore urged to make good use of daily, ten day and monthly updates issued by the Tanzania Meteorological Agency.

Tanzania Meteorological Agency will continue to monitor developments of the weather systems and issue updates.

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